

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claim 24 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

3. Claim 24 recites the limitation "into an application tool of the application robot having a suction strip" in line 3. There is insufficient antecedent basis for this limitation in the claim.

### ***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Habisreitlinger et al. (US 6699346) in view of Walter et al. (US 5997670).

Habisreitlinger et al. (US '346) discloses a system for applying protective films to car bodies (Abstract). As seen in Fig. 1., US '346 discloses that the system comprises of a plurality of workstations arranged one after another (I-V); a horizontal conveying device (F) for conveying vehicle parts to be treated through the workstations (Fig. 2); at

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least one pair of robots (IR2, IR3) at an application station for joint handling of a film for said application; supply roll holders with a cutter for cutting pieces of film drawn off by said an application robot (Fig. 5; column 8, lines 40-55); a perforator for perforating said film (IR1). US '346 specifically discloses that the supply rolls (V1, V2, V3) are arranged over the horizontal conveying device (F) so that the material is drawn out parallel to the conveying direction (column 9, lines 15-33). US '346 further discloses that the supply rolls (V1, V2, V3) may be arranged in a different manner and that the procedure for drawing out and applying the film would need to be altered accordingly for said arrangement. It is the position of the Examiner that this encompasses the claimed arrangement of supply rolls on the side of the conveying device.

US '346 fails to teach that the system has two separate application stations; wherein the first station contains two pairs of application robots and the second station contains one pair of application robots; or that the base elements of each robot is arranged in a fixed location. Examiner points out that US '346 discloses that the application robots (IR2, IR3) are movable because the system utilizes one pair of robots to apply different webs of material (V1, V2, V3) to the vehicle (Fig. 4.; column 5, lines 4-8), whereas the system as claimed utilizes a pair of robots to apply a specific web to the vehicle. The application robots of US '346 must be capable of moving because after applying one film to the vehicle, the robots must be capable of going back to grab another film to apply to said vehicle. If a pair of application robots are dedicated to applying only one film to the car, there is no need for the robots to be movable and thus may be fixed relative to the conveyance means. Modifying the system of US '346 so

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that a pair of fixed application robots are used for each film, V1-V3, would have been obvious to one of ordinary skill in the art at the time of the invention. Mere duplication of parts has no patentable significance unless a new and unexpected result is produced.

In re Harza, 274 F.2d 669, 124 USPQ 378 (CCPA 1960).

Furthermore, it is the position of the Examiner that utilizing fixed robots in separate application stations with fixed robots for specific films to a vehicle is well known in the art and would have been obvious to one of ordinary skill at the time of the invention. Walter discloses a system for applying protective films to car bodies (Abstract). Walter discloses a system comprising of two separate application stations (12, 13); said stations each have supply rolls (20, 20', 20'') which dispense protective films transversely to the conveyance direction; the application stations have robots (35, 35', 35'') with fixed bases relative to the conveyance of the vehicle; and application station 12 comprises of a pair of applicator robots for two films, application station 13 has one applicator robot for applying one film.. It would have been obvious for one of ordinary skill in the art to modify the system of US '346 with known successful systems for applying films, such as individual application stations with fixed robots for applying films transversely to vehicles as taught by Walter et al., because such a substitution would have been within his technical grasp.

As to claim 19, the system of claim 13 is taught as seen above. Walter further discloses that the width (R) of the supply rolls corresponds to the part of the vehicle to be covered by each particular application station, i.e., the roof, rear lid, engine bonnet (Fig. 1; column 7, lines 36-51).

As to claim 20, the system of claim 13 is taught as seen above. US '346 discloses that the perforator (IR1) with a perforating wheel can be integrated into a programmable control system wherein the application robots (IR2 & IR3) hold the film in a stretched state while the perforator makes perforations in said film (column 6, lines 8-47).

As to claim 21, the system of claim 20 is taught as seen above. US' 346 discloses that the piece of film may be moved by the application robots in a horizontal manner under the perforator, and shows that the perforator makes said perforations through the top of the film (Fig. 3). US '346 further discloses that 6-axe bent arm robots may be used to guide the perforator over the film (column 6, lines 27-30). It is the position of the Examiner that the 6-axe bent arm robot would be capable of arranging the perforator with a vertical pivot axis.

Furthermore, It is the position of the Examiner that a perforating wheel with a vertical pivoting axis is well known in the art and would have been obvious to one of ordinary skill at the time of the invention. Walter discloses a perforating wheel with a vertical pivoting axis for perforating the film (Fig. 12). It would have been obvious to incorporate a known apparatus for perforating a film, such as a the perforating wheel with a vertical pivoting axis as disclosed by Walter, into the system of US '346 because such an incorporation would have been within his technical grasp.

As to claims 22 and 23, the system of claim 13 is taught as seen above. The system of the above references as combined would be capable of having a first section comprising of two pairs of robots and a second application station with only one pair of

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robots; the first section capable of applying a film for the hood and rear panel area of the vehicle and the second section capable of applying a film to the roof area of the vehicle body.

As to claim 24, the system of claim 13 is taught as seen above. US '346 further discloses that the system may have tape applicators (80) on separate application robots (IR4, IR5) for application of a narrow self-adhesive edge securing tape (Fig. 12, column 10, lines 27-60), but fails to disclose whether the tape applicator may be integrated into the film application robots. It is the position of the Examiner that integrating a taping mechanism of US '346 into a non-dispensing robot of the system of the above references as combined would have been obvious to one of ordinary skill at the time of the invention. The use of a one piece construction instead of the structure disclosed by the prior art would be merely a matter of obvious engineering choice. *In re Larson*, 340 F.2d 965, 968, 144 USPQ 347, 349 (CCPA 1965)

6. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Habisreitlinger et al. (US 6699346) in view of Walter et al. (US 5997670) as applied to claim 13 above, and further in view of JP-06255873.

US '346 discloses that the applicator robots (IR2, IR3) contain suction strips (S2, S3) for grasping the tape. US '346 and Walter et al. fail to disclose whether one of the application robots which handle and apply a single piece of film may contain a roll of film and a cutter so that said film may be dispensed from the robot for application to an object in the system.

It is the position of the Examiner that robots capable of dispensing a film is well known in the art and would have been obvious to one of ordinary skill at the time of the invention. US '346 discloses that it is known to utilize material dispensers (80) on the end of industrial robots (IR4, IR5) for placement onto a vehicle (Fig. 12, 14; column 10, line 50 - column 11, lines 25). The dispenser comprises of a roll of film (86); downstream of that a holding piece (92); further downstream a cutting mechanism (96) for cutting individual film pieces from the roll; further downstream a gripper (100) for pulling the film to an application roll for applying the film to a vehicle (Id.).

JP-06255873 (JP '873) discloses an apparatus for dispensing and applying a film material for lamination onto a vehicle. The apparatus comprises of a roll of material (R); a holding bar (2) for holding the film so that the end is easily accessible; a cutting mechanism (3) for cutting individual film pieces from the roll; two holding mechanisms (4 & 5) for drawing out, holding, and subsequently laminating a single piece of film onto a vehicle (Fig. 1). Examiner notes that the material dispenser on the end of the IR4 and IR5 application robots has some of the same components as the apparatus of JP '873, a roll of material, a cutter and a holding mechanism for holding the edge of the film. It would have been obvious for one of ordinary skill at the time of the invention to modify the one of the application robots in the robot pairs of the above references as combined with a known successful film dispensation mechanism, such as the mechanisms disclosed by US '346 and JP '873, because such a modification would have been within his technical grasp.

As to claim 15, the system of claim 14 is taught as seen above. US '346 discloses that it is known in the art to fit the a dispensation robot with an automatic roll change replacement of empty rolls of material (column 12, lines 11-20). It is the position of the Examiner that this would encompass the magazine of supply rolls as claimed.

As to claim 16, the system of claim 14 is taught as seen above. It is the position of the Examiner that supply rolls sized for 100 to 200 application procedures would have been obvious to one of ordinary skill at the time of the invention. The number of applications provided by each roll is a result effective variable dependent upon the length/size of the part to be covered by a film piece and the linear length of the film roll that would be determined by routine optimization from the artisan.

As to claim 18, the system of claim 14 is taught as seen above. US '346 discloses that a compensation (32) roller is provided for the regulated and defined pulling off of the film from the supply roll (column 7, lines 7-10). It appears that fixing the supply roll "against film being drawn off" means utilizing a braking mechanism to control the dispensation of material from the roll (Applicant Specification ¶28; Fig. 3). It is the position of the Examiner that regulation of the film by roller (32) of US '346 constitutes a braking mechanism and encompasses the limitations of claim 18.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CHRISTOPHER C. CAILLOUET whose telephone

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number is (571)270-3968. The examiner can normally be reached on Monday - Thursday; 9:30am-4:00pm, EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Phillip Tucker can be reached on (571) 272-1095. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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